## SEQUENCE LISTING

					,		SI	EQUE	ICE I	LIST	NG							
	<11	1 1 1	KOIDE HIROS MORIC	EUCHI E, Yo SE, Y SUCHI E, Ki	oshir Yoshi I, Mi	nalo Lhiko Ltsua	)											
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	•				-				\	Me 1	t Se	r Gl	n Se	r As	p Se	r Gln		
									1	\ _				_				
	CCC Pro	Dhe	gac	ctg	ctg	ctc	gcg	ggc	ggc	acc	ctc	atc	gac	ggc	agc	aac	102	
	110	1110	10	Deu	neu	ьец		· 15	GIY	Lui	Leu	TTE	Asp 20	GIY	ser	Asn		
			_							- \			20					
	acc	ccg	aāa	cgg	cgc	gcc	gac	ctg	ggc	a <b>f</b> a	cgc	ggc	gac	cgc	atc	gcc	150	
	Thr	Pro	Gly	Arg	Arg	Ala		Leu	Gly	Va	Arg		Asp	Arg	Ile	Ala		
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-	Ala	Ile	ĞÎy	Asp	Leu	Ser	Asp	Ala	Ala	Ala	His	Thr	Ara	Val	Asp	Val	196	
	40					45	-				<b>\$</b> 0				<b>-</b>	55		
		~~~	a+ ~	~							- 1							
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	JC1	Ory	Бец	vai	60	Ata	PIO	GIY	Pne	65	Asp	ser	HIS	Thr	H1S	Asp		
											- /				-			
9	gac	aac	tac	ctg	ctc	agg	cgt	cgc	gac	atg	acg	ccc	aag	atc	tcg	cag	294	
7	Asp	Asn	Tyr	Leu	Leu	Arg	Arg	Arg	Asp	Met	Thr	Pro	Lys	Ile	Ser	Gln		
				75					80			\		85				
(	ggc	gtc	acc	acq	ata	atc	aco	aac	aat	tac	ggc	alt c	acc	cta	aca	ccc	242	
Č	зīу	Val	Thr	Thr	Val	Val	Thr	Gly	Asn	Cys	Gly	Ike	Ser	Leu	Ala	Pro	342	

		90					95					100				
ctg Leu	gcg Ala 105	cac His	gcc Ala	aac Asn	ccg Pro	ccc Pro 110	gcc Ala	ccc Pro	ctg Leu	gac Asp	ctg Leu 115	ctg Leu	gac Asp	gaa Glu	ggc Gly	39
ggc Gly 120	tct Ser	tac Tyr	cgt Arg	ttc Phe	gag Glu 125	cgc Arg	ttc Phe	gcc Ala	gac Asp	tac Tyr 130	ctg Leu	gac Asp	gcg Ala	ttg Leu	cgg Arg 135	438

gcc Ala	acg Thr	ccg Pro	gcg Ala	gcc Ala 140	gtc Val	aac Asn	gcc Ala	gcc Ala	tgt Cys 145	atg Met	gtg Val	ggc Gly	cat His	tca Ser 150	acg Thr	486
ctg Leu	cgc Arg	gcc Ala	gcg Ala 155	gtc Val	atg Met	ccg Pro	gac Asp	ttg Leu 160	cag Gln	cgc Arg	gcc Ala	gcc Ala	acc Thr 165	gac Asp	gag Glu	534

gaa Glu	atc Ile	gcg Ala	gcc Ala	atg Met	cgg Arg	gac Asp	ctg Leu	gcc Ala	gag Glu	gaa Glu	gcc Ala	atg Met	gcc Ala	agc Ser	ggc Gly	582
		170					175					180		201	Cly	

gcc Ala	atc Ile 185	ggc Gly	att Ile	tcg Ser	acc Thr	ggc Gly 190	gcc Ala	ttc Phe	tac Tyr	ccg Pro	ccc Pro 195	gcc Ala	gcc Ala	cgc Arg	gcc Ala		630
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gcg Ala	ctg Leu	gag Glu	Glu	acc Thr	ttc Phe	cgc Arg	atc Ile	ggc Gly	cgc Arg	gag Glu	ctg Leu	gac Asp	gtg Val	ccg Pro	gtg Val	774
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cgc gac ctg ggc ctg ttc ccg ctg gag acg gcg gta tgg aag atg acc Arg Asp Leu Gly Leu Phe Pro Leu Glu Thr Ala Val Trp Lys Met Thr 395 400 405	1254										
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gcc ggg tac ttc gcc gac ctg gtg gtg ttc gac ccg gcc acg gtg gcc Ala Gly Tyr Phe Ala Asp Leu Val Val Phe Asp Pro Ala Thr Val Ala 425 430 435	1350										
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Ala His Thr Arg Val Asp Val Ser Gly Leu Val Val Ala Pro Gly Phe 50 55 · 60

Ile Asp Ser His Thr His Asp Asp Asn Tyr Leu Leu Arg Arg Asp 65 70 75 80

Met Thr Pro Lys Ile Ser Gln Gly Val Thr Thr Val Val Thr Gly Asn 85 90 95

Cys Gly Ile Ser Leu Ala Pro Leu Ala His Ala As<br/>n Pro Pro Ala Pro 100 105 110

Leu Asp Leu Leu Asp Glu Gly Gly Ser Tyr Arg Phe Glu Arg Phe Ala 115 120 125

Asp Tyr Leu Asp Ala Leu Arg Ala Thr Pro Ala Ala Val Asn Ala Ala 130 135 140

Cys Met Val Gly His Ser Thr Leu Arg Ala Ala Val Met Pro Asp Leu 145 150 155 160

Gln Arg Ala Ala Thr Asp Glu Glu Ile Ala Ala Met Arg Asp Leu Ala 165 170 175

Glu Glu Ala Met Ala Ser Gly Ala Ile Gly Ile Ser Thr Gly Ala Phe 180 185 190

Tyr Pro Pro Ala Ala Arg Ala Thr Thr Glu Glu Ile Ile Glu Val Cys 195 200 205

Arg Pro Leu Ser Ala His Gly Gly Ile Tyr Ala Thr His Met Arg Asp 210 215 220



Glu Gly Glu His Ile Val Ala Ala Leu Glu Glu Thr Phe Arg Ile Gly 225 230 235 240

Arg Glu Leu Asp Val Pro Val Val Ile Ser His His Lys Val Met Gly 245 250 255

Gln Pro Asn Phe Gly Arg Ser Arg Glu Thr Leu Pro Leu Ile Glu Ala 260 265 270

Ala Met Ala Arg Gln Asp Val Ser Leu Asp Ala Tyr Pro Tyr Val Ala 275 280 285

Gly Ser Thr Met Leu Lys Gln Asp Arg Val Leu Leu Ala Gly Arg Thr 290 295 300

Ile Ile Thr Trp Cys Lys Pro Phe Pro Glu Leu Ser Gly Arg Asp Leu 305 310 315 320

Asp Glu Val Ala Ala Glu Arg Gly Lys Ser Lys Tyr Asp Val Val Pro 325 330 335

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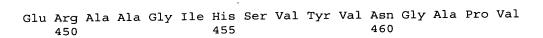
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Arg Val Leu Gly His Tyr Ala Arg Asp Leu Gly Leu Phe Pro Leu Glu 385 390 395 400

Thr Ala Val Trp Lys Met Thr Gly Leu Thr Ala Ala Arg Phe Gly Leu
405 . 410 415

Ala Gly Arg Gly Gln Leu Gln Ala Gly Tyr Phe Ala Asp Leu Val Val 420 425 430

Phe Asp Pro Ala Thr Val Ala Asp Thr Ala Thr Phe Glu His Pro Thr 435 440 445



Trp Gln Glu Gln Ala Phe Thr Gly Gln His Ala Gly Arg Val Leu Ala 465 470 475 480

Arg Thr Ala Ala

153

10/009782

一配 列 表

## SEQUENCE LISTING

<110> Amano Pharmaceutical Co., Ltd

¬ (name changed) Amano Enzyme Unc.

<120> 形質転換微生物、D-アミノアシラーゼの製造方法

Ly Transformed Microorganism and Process

<130> POK-99-022

LIPOKOO-OLOWOLLS

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<210> 1

<211> 1758

<212> DNA

<213> Alcaligenes xylosoxydans subsp. xylosoxydans

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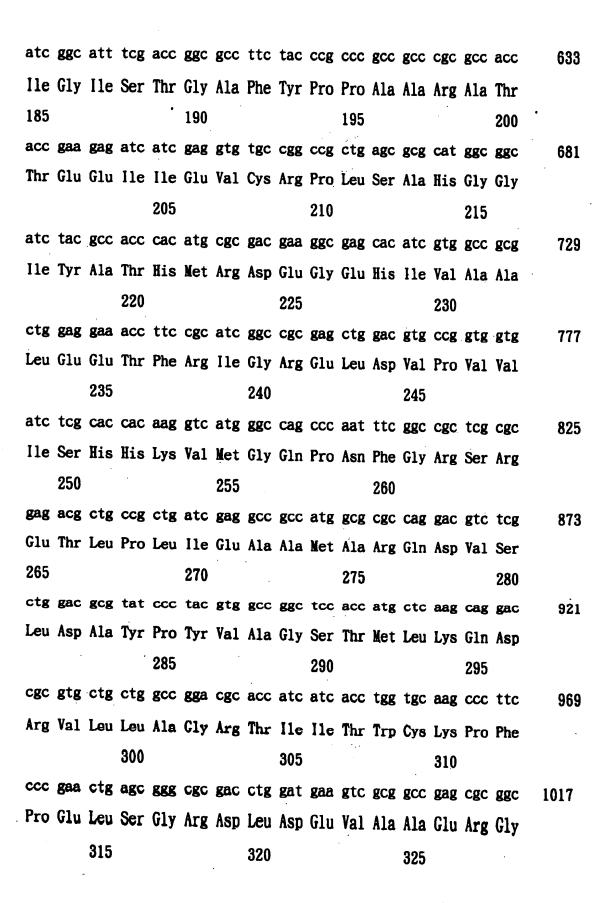
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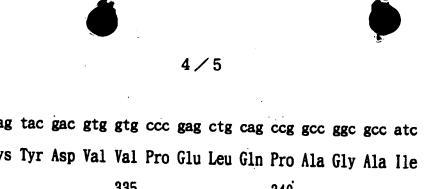
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lle	G1y	Ası	Leu	ser Ser	· Asp	Ala	Ala	Ala	His	Th	r Arg	y Va	l As	p Va	l Ser	•	
				45			•		<b>5</b> 0					55			
ggc	ctg	gtg	gto	gcg	CCC	ggc	ttc	ato	gac	tce	cac	ace	c ca	c ga	ac ga	.c 2	249
G1y	Leu	Val	. Val	Ala	Pro	G1	y Ph	e II	e As	p Se	er Hi	s TI	ır H	is As	sp As	p	
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Ser	Tyr	Arg	Phe	G1u	Arg	Phe	Ala	Asp	Tyr	Leu	Asp	Ala	Leu	Arg	Ala		
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155



4 1 15



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